

a strategic framework for economic growth: competitive imperatives for the Commonwealth



Choosing to Compete demonstrated that all of the stakeholders in economic growth - business, labor, government, academic institutions, and community groups - can collaborate to implement policies that promote economic competitiveness. In this chapter, we offer a new strategic framework for the Commonwealth. The framework consists of six “competitive imperatives,” or issues the Commonwealth must address to ensure prosperity over the long term. This framework, along with a vision for economic development, will help orient economic stakeholders to a common course of action.

The overarching objective of this strategic framework is a high quality of life for all citizens of the Commonwealth, the vision we propose in Chapter 3. This includes the traditional economic development goals of job growth and high and rising incomes. It also insists upon a shared prosperity and broad economic opportunity among diverse population groups and regions of the State and a sustainable prosperity that advances environmental and civic objectives (see sidebar, *Toward a New Prosperity: A Shared Vision for the Commonwealth*).

As described in Chapters 1 and 2, we can only realize this vision by enhancing the competitiveness of the Commonwealth and of each of our regions. Vibrant export industry clusters are today’s primary engines of economic growth. The comparative advantage of the Commonwealth lies in our rapidly growing knowledge-based export industries. Chapter 2 identified four factors that underlie the ability of these export industries to generate a continuing stream

of innovations and productivity gains:

- Knowledge workers
- Networked entrepreneurship
- Responsiveness to the opportunities created by globalization
- Attention to the importance of place

These four factors are the critical points of leverage in our strategic framework for economic development.

A Strategic Framework for Economic Growth in Massachusetts

Three principles form the foundation of our framework: First, government is most effective when it provides a healthy environment for business, not when it intervenes in the competitive process. The competitive success of the export sector is the dominant factor driving the Commonwealth’s overall economic prosperity (to learn more about the Commonwealth’s export industry clusters, see Chapter 2). But market forces are best at determining where the best opportunities lie. Thus, government should not pick winners and losers. Nor should it target specific industries or regions for the presumed common good. Government, instead, should focus on strengthening the economic foundation of all regions in the Commonwealth. In today’s economy, it should provide tools and resources to leverage the four critical success factors and support the

development of vibrant export industry clusters throughout the Commonwealth.

Second, each region and industry cluster in the Commonwealth faces its own unique set of opportunities and challenges. There is no simple “one size fits all” economic development solution. Each region and cluster must identify initiatives that best respond to its particular needs. In essence, the Commonwealth needs a flexible strategic framework – a growth agenda that is responsive to different economic conditions and local challenges.

Third, a shared leadership process is the best way forward. Business, labor, government, academic, and community groups increasingly use networks and collaborative, networked entrepreneurship to improve operations and bring innovative products to market. These networks provide access to funding, to business and employment opportunities, and to critical technical and market information. Government can make a significant contribution by establishing, nurturing, and *participating* in these networks. Government should use these networks to gather and share information, to improve access to public-sector resources and expertise, and to involve the larger community in economic development decisions.

Competitive Imperatives for the Commonwealth

The six competitive imperatives represent a set of strategic challenges the Commonwealth must confront if it is to enjoy long-term prosperity. Accordingly, the imperatives impart broad direction and urgency to the Commonwealth’s economic development efforts. The imperatives also provide a framework that links specific policy options to a shared vision for the Commonwealth.



Imperative No. 1: Improve the Business Climate to Support All Industry Clusters

Vibrant and innovative industry clusters are the primary engines of economic development. This is especially true in the Commonwealth’s networked, knowledge-based economy. Massachusetts must focus its energies on developing strong export industry clusters throughout the State. This imperative suggests two desired outcomes:

► **Desired Outcome: Strong export industry clusters throughout Massachusetts.**

Vibrant industry clusters that export goods and services beyond the region or the Commonwealth are the primary long-term drivers of economic growth (See Chapter 2). Current economic development efforts focus excessively on

Toward a New Prosperity: A shared vision for the Commonwealth

- Rising incomes
- Job growth
- Strong regional economies
- Broad economic opportunity
- Environmental sustainability
- Healthy and safe citizens
- Strong civic culture

specific industries, regions, or target areas. Some industries and locations get far more attention than others. Too few initiatives promote competitiveness more broadly across all industries and regions.

► **Desired Outcome: Firms in export industry clusters continually innovate to meet high value customer needs most effectively.**

Every firm must leverage its innovative capacity to compete in today’s increasingly fast-paced and highly competitive marketplace. Globalization only increases these pressures on Massachusetts firms. Capacity for innovation and productivity gains is not, however, equally present in all industries and regions of the Commonwealth. Much of our employment growth in the 1990s was concentrated in a limited number of knowledge-intensive clusters in or around Greater Boston. Many Massachusetts firms in these high-growth industries are less mature and are poorly linked to our institutions of higher education – the Commonwealth’s most critical competitive resource. Strengthening networks and opportunities for networked entrepreneurship will help improve the business climate, foster innovation and rising productivity, and enhance economic opportunities for all regions of the Commonwealth. To learn more about networked entrepreneurship, see Chapter 2.

Imperative No. 2: Support Entrepreneurship and Innovation

Entrepreneurship and innovation – important in any economy – are especially critical in fast-moving, networked, knowledge-based economies. We must strengthen the Commonwealth's innovation infrastructure by improving channels of communication and access to resources and by reducing regional disparities in business opportunities and access to capital. We must create a climate across the Commonwealth in which entrepreneurs can thrive. This imperative points to three desired outcomes:

► Desired Outcome: A statewide climate where entrepreneurs flourish.

Entrepreneurship and innovation, supported by our knowledge creation infrastructure, are the foundation of the Commonwealth's economy. Today, Massachusetts enjoys formidable capacity in both areas. But competition from other states and other regions, and worldwide competition, may diminish our competitive advantage in the future. We must protect and extend these advantages to all our regions of the Commonwealth if Massachusetts is to retain its leadership in technical innovation and entrepreneurship.

We can strengthen our entrepreneurial environment by enhancing links between the business community and State government, by fostering communication, by improving access to the resources available in the Commonwealth, by increasing speed and lowering the costs of transactions with government, and by enhancing opportunities for under-represented regions and populations.

► Desired Outcome: Reduced disparities in entrepreneurial opportunities.

Business opportunities and funding remain concentrated in the eastern portion of the Commonwealth. Trends in Small Business Innovation Research Grant (SBIR) awards show a similar geographic imbalance. The Greater Boston region has a particular regional specialization which provides opportunities for other regions in the State through potential inter-regional linkages. However, women and minorities may be under-represented, especially in regions beyond greater Boston. In the United States, one woman is involved in entrepreneurship for every two men. Also, women and minorities frequently lack access to networks providing financing and professional services.¹ Successfully connecting entrepreneurs throughout the Commonwealth to funders, researchers, business service providers, and other critical resources, will also enhance the capacity of our entrepreneurial networks and boost the and innovative capacity of the larger Massachusetts economy.

► Desired Outcome: A strengthened technological innovation infrastructure.

Our knowledge creation facilities and entrepreneurial networks, which convert such knowledge into practical innovations, are among the Commonwealth's most important assets. Competing states, however, are making substantial investments to create or upgrade their university research facilities. Massachusetts has traditionally relied heavily on federal R&D funding. However, the Commonwealth's relative share of these funds is declining. Between 1996 and 1998, federal R&D funding in Massachusetts grew more slowly than in competing states – and much more slowly than in states with relatively new programs.² The Commonwealth must find new resources and ways to maintain and build upon its strong infrastructure for knowledge-based innovation to enhance our long-term competitiveness.

Imperative No. 3: Prepare the Workforce of the 21st Century

The quality of our workforce will increasingly determine the extent of the Commonwealth's economic success. In a technology-based, innovation-led economy, people and the skills they possess are fundamental to the creation of economic value. Our firms must have access to the talent they need. Our workers must have skills that match the opportunities emerging in the competitive marketplace. Programs that train these workers and expand the Commonwealth's base of knowledge workers will help both firms and workers. As such, they are essential elements of efforts to promote long-term growth and competitiveness. We must view this imperative from both the employer and employee perspective, framed as two desired outcomes:

► Desired Outcome: Firms have access to the talent they need to succeed.

The Commonwealth's employers, especially in knowledge intensive industries, continually have difficulty finding and retaining workers with particular skills. In spite of the recent recession, shortages of engineers and information technology professionals remain. Currently, the education and health care sectors have tremendous difficulty locating and retaining replacements for retiring teachers and nurses. These skill shortages pose especially serious challenges to firms seeking to locate or grow in the Commonwealth. The Massachusetts Division of Employment and Training projects

that the largest number of new jobs in the Commonwealth will emerge in occupations requiring additional education, mostly at the BA/BS level, or higher.³

The Commonwealth should work to strengthen partnerships among employers, primary schools, community colleges, and universities to give workers the skills needed to function in today's economy. Enhancing access to affordable, high-quality, higher education will be essential if this challenge is to be met. Our educational institutions must provide "work ready" graduates who possess appropriate technical skills such as the ability to read, write, and compute, as well as the "soft" skills needed to function effectively in teams.

► **Desired Outcome: Worker skills match the needs of business and the competitive environment.**

Today, too many of our workers lack the educational background needed to compete in the current economy. Others have limited earning capacity because they have not been prepared to think critically, solve complex problems, communicate effectively, or use computers and other technologies.

Once on the job, unrelenting market pressures require our workers to develop new skills and adapt to a fluid labor market throughout their careers. In this dynamic market, workers change employers and even careers with increasing frequency. Thus, the Massachusetts workforce development system must effectively coordinate job-training resources. The Commonwealth's One-Stop network is intended to do that, serving as the point of contact for both employers and job seekers. But the lack of a coherent strategy, effective outreach, resources, and coordination of these services restricts access to training and employment services for both businesses and workers. These restrictions would be eased through improved system coordination and a more explicit integration of the State's workforce development and higher education systems.

Imperative No. 4: Build the Information Infrastructure of the 21st Century.

Globalization means enhanced access to opportunities and resources throughout the world. In the coming decade, the breadth and reach of the State's information infrastructure will be a critical factor determining our access to those opportunities and resources. Therefore, we must facilitate access to affordable, competitive, broadband options throughout the Commonwealth.

Universal and affordable broadband access will enhance the Commonwealth's competitiveness in various ways. It will expand the size of the State's entrepreneurial networks. This will facilitate firm formation and expansion, especially in currently unserved areas. Affordable options will also give these businesses better access to market opportunities around the world. Finally, affordable broadband will improve the quality of place for firms, knowledge workers, and the people of the Commonwealth. This imperative has one desired outcome:

► **Desired Outcome: Access to affordable, competitive broadband options throughout the Commonwealth.**

Success requires a shared vision for broadband deployment. Today, business and government lack a common idea of how to deliver affordable broadband service to all regions of the State. This vision is difficult to develop as market, regulatory, and technology factors all shape the status of broadband deployment in the Commonwealth. Conflicts between immediate and longer-term needs further complicate efforts to define a common approach to broadband deployment.

Massachusetts' deregulated telecommunications industry relies on private, market-driven investment to "build out" its telecommunications infrastructure. To date, this approach has yet to deliver affordable broadband options to less densely populated and less affluent communities. The recent retrenchment in the telecommunications industry complicates matters, as it limits the capital available for necessary infrastructure investment.

Imperative No. 5: Ensure that Economic Growth is Compatible with Community and Environment

Massachusetts must develop sufficient housing and commercial/industrial space to accommodate a growing economy. At the same time, we must implement sustainable growth strategies that protect our environment and ensure a high quality of life in our cities and towns.

¹ William Bygrave, Dean Shepherd, and Andrew Zacharias, *Global Entrepreneurship Monitor: National Assessment, the United States of America – 2000 Executive Report*. Kauffman Center for Entrepreneurial Leadership at the Ewing Marion Kauffman Foundation, 2000. Pgs. 9 and 15.

² Massachusetts Technology Collaborative, *Maintaining the Innovation Advantage: The Case for Creating a Massachusetts Science & Technology Policy*, August 2001, pp. 10-11.

³ Massachusetts Division of Employment and Training, Economic Analysis Department, *Massachusetts Employment Projections through 2008: A Focus on the Jobs, the Industries, and the Workforce*, 2000, p. 8.

Rapidly rising costs for housing and other forms of real estate have hampered the Commonwealth's growth. Recently, the jump in home prices in many parts of Massachusetts has been a serious hardship for workers wanting to move into the Commonwealth, and for many Massachusetts families wishing to purchase their first home.

Successfully addressing these issues will not only improve our quality of life, but will also enhance the State's economic competitiveness. Attending to both economic development and the quality of place will increase the Commonwealth's attractiveness to businesses and knowledge workers who demand a high quality of life in the places they choose to locate. This imperative requires attention to two desired outcomes:

Desired Outcome: Massachusetts is a leader in implementing development strategies that preserve a high quality of life.

Current development planning suffers from a lack of coordination among impacted parties. At the State level, critical transportation infrastructure investments are largely made independent of broader economic development and growth planning considerations. The Commonwealth also has a long-standing tradition of local control that gives our cities and towns significant authority over many matters related to growth. Our communities, however, often lack sufficient trained staff to keep pace with evolving federal and State regulations governing growth and infrastructure decisions. They also lack the resources necessary to support their planning and/or zoning boards, resulting in substantial delays in evaluating proposed developments.

Improved coordination of State and local planning bodies will add coherence to development practices and focus incentive systems to reverse the trend toward costly, low-density development. This will improve the sustainability of growth and the quality of life throughout the Commonwealth.

Desired Outcome: Massachusetts implements housing affordability solutions to support growing businesses and their employees.

Rising home values are boosting homeowner wealth. However, young, low-income, and middle-income workers find it increasingly challenging to find an affordable home within a reasonable commuting distance from work. As a result, employers frequently find it hard to attract the workers they need. An ample housing stock should help moderate price increases and make the State more attractive to such workers and their employers.

Imperative No. 6: Improve the Outcomes of Government Action.

We must continue to seek wise regulation and better coordinated and more effective services and business assistance. Wise regulation is the product of business and government seeking improved mutual outcomes from regulation. The needs of small businesses are especially acute. The Commonwealth must also swiftly and effectively respond to emerging terrorism threats and maintain confidence in the basic infrastructure linking global production, communication, and transportation networks.

Desired Outcome: State government provides more effective and better-coordinated services and resources to businesses, particularly small businesses.

The Commonwealth is active in many policy areas that shape the lives of its citizens and businesses. One unanticipated consequence has been the proliferation of agencies and quasi-public organizations with closely related and often overlapping missions. This approach has benefits, including specialized expertise and flexibility. Unfortunately, these benefits are too frequently accompanied by a lack of accountability and effectiveness. Too many agencies issue regulations and provide outreach and technical support. This fragmentation makes it hard for business, especially small business, to understand government programs and access its services and resources. Thus, government should fashion, deploy, and market comprehensive responses specifically designed for our economic development needs.

Desired Outcome: Business and government develop "wise" regulations.

The shift toward a more collaborative regulatory model improved the quality of government action and compliance on the part of business. Nevertheless, we must do more. Improved coordination and a periodic review of all regulations can update, simplify, or eliminate many redundancies and contradictory requirements. Regulations should also be sensitive to the size of the business expected to comply. Small businesses lack the resources needed to keep pace with regulations and their changes – especially regulations that are difficult to find and interpret.

A comprehensive assessment of the Commonwealth's regulatory climate is needed and mechanisms to help our regulatory agencies improve their effectiveness must be developed. While collaborative approaches improve regulation and the regulatory climate, they tend to focus the attention of both

business and government on compliance issues. It is important to remain focused on the problems that led to regulation in the first place. The Commonwealth needs more efficient regulatory mechanisms and better ways to expand regulatory flexibility.⁴

Desired Outcome: Massachusetts is widely recognized as a leader among states in developing innovations in government.

Leadership in regulatory matters will create significant value for our citizens and businesses and free up private sector resources formerly devoted to compliance. Leadership in program design and service delivery will support business more effectively, providing more information, services, and resources while lowering transaction costs. A productive and efficient government – with a focus on economic development – is a significant competitive advantage. The fundamental purpose of this report is to move the Commonwealth in this direction.

Desired Outcome: Massachusetts enhances the competitiveness of its regions by reducing costs affecting all businesses.

Governments help shape a region's competitiveness through the provision of services, regulations, and incentives – all of which influence costs borne by business. Governments can contribute to these costs directly, through decisions relating to taxes and fees, as well as indirectly, through budget or staffing decisions that can reduce or enhance business efficiency or raise or lower transaction costs. Efficient service delivery can lower transaction costs and improve predictability and help all businesses focus their resources on competition and growth.

Desired Outcome: Massachusetts has a well-coordinated and effective response to terrorist attacks.

The September 11 attacks generated a great deal of anxiety about the Commonwealth's readiness to effectively respond to a terrorist attack. An attack could imperil the lives of citizens and substantially damage the State's economy. Government must anticipate and plan for such attacks and prevent them where possible. Should an attack occur, government must respond quickly and effectively mitigate any adverse impacts. More broadly, government must restore confidence in the safety and security of our infrastructure networks and the continuing vitality of our economy. Our knowledge-based export

clusters and travel and tourism industries, in particular, depend on a safe and secure infrastructure – and on the perception of safety and security. The larger economic and entrepreneurial sector also needs to understand the fiscal implications of State government's new security obligations.

A Framework for Action

Part III of this report is designed to provide all stakeholders – business, labor, government, academic institutions, and community groups – with a set of policy options to help advance this strategic framework. Part III further organizes these *desired outcomes* into more targeted *policy options* and *success measures* that could help advance a shared vision for the Commonwealth's economic future. Part III is designed as a resource for those in the public, private, and non-profit sectors who are actively advancing economic development initiatives for the Commonwealth and/or its seven constituent regions.

The strategic framework presented in this document is meant to serve as a springboard for future leadership. We hope that the framework presented here helps structure a debate that is constructive and moves the Commonwealth *Toward a New Prosperity*.

⁴ Andrew Hoffman, Hanna Riley, John G. Troast, Jr. and Max Bazerman (2000) "Cognitive and Institutional Barriers to New Forms of Cooperation on the Environment: Insights from Project XL and Habitat Conservation Plans."